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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,095	06/11/2002	Chih-Wei Hung	9068-US-PA	7113

31561 7590 08/04/2009
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
7 FLOOR-1, NO. 100
ROOSEVELT ROAD, SECTION 2
TAIPEI, 100
TAIWAN

EXAMINER

GURLEY, LYNNE ANN

ART UNIT	PAPER NUMBER
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2811

NOTIFICATION DATE	DELIVERY MODE
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08/04/2009

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHIH-WEI HUNG

Appeal 2009-006132
Application 10/064,095
Technology Center 2800

Decided:¹ July 31, 2009

Before JOSEPH F. RUGGIERO, MARC S. HOFF,
and ELENI MANTIS MERCADER, *Administrative Patent Judges*.

MANTIS MERCADER, Administrative Patent Judge.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

Appellant seeks our review under 35 U.S.C. § 134(a) of the Examiner's rejection of claims 1-7 and 16. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

INVENTION

Appellant's claimed invention is directed to a photodiode image sensor device having a conductive layer 212 capping an isolation structure 204 of a photodiode 206 to protect the isolation structure 204 from damage in sequential processes and thereby reducing the dark-current effect and increasing the image sensor performance and exposure time (Spec. ¶¶ [0002], [0024]).

Claim 1, reproduced below, is representative of the subject matter on appeal:

1. A complementary metal oxide semiconductor (CMOS) image sensor device comprising:
 - a substrate;
 - an isolation structure formed on the substrate;
 - a photodiode sensing region formed under the isolation structure in the substrate;
 - a reset transistor located on the substrate, wherein the reset transistor has a source region connected to a part of the photodiode sensing region; and
 - a local interconnect, wherein a first end of the local interconnect is located on the substrate between the photodiode sensing region and the reset

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transistor, extending to an upper portion of the isolation structure to cover a periphery of the isolation structure over the photosensing region and electrically connect to the source region of the reset transistor, and a second end of the local interconnect is located on the active region of the substrate to be used as a gate of a source follower transistor.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Chen	US 6,392,263 B1	May 21, 2002
He	US 6,649,950 B2	Nov. 18, 2003 (filed Nov. 6, 2001)
Rhodes	US 6,740,915 B1	May 25, 2004 (filed Nov. 12, 1998)

The following rejections are before us for review:

The Examiner rejected claims 1-7 and 16 under 35 U.S.C. § 103(a) as being unpatentable over He in view of Chen and Rhodes.

We note that Appellant lists rejected claim 16 to be reviewed on appeal (Br. 2) but they do not present any arguments with respect to that claim (Br. 4-8).²

OBVIOUSNESS ISSUE

Appellant contends *inter alia* that there is lack of motivation to combine the teachings of Rhode and Chen (Br. 7, 3rd full ¶). Appellant further contends that while He teaches covering the photodiode with an overlying structure, He does not teach a local interconnect covering the periphery of an isolation structure over the photosensing region (Br. 7, 3rd full ¶).

The Examiner responds that one cannot show non-obviousness by attacking the references of He, Chen, and Rhodes individually where the rejection is based on the combined teachings of those references (Ans. 5-6). Furthermore, the Examiner states that one skilled in the art ““would have found it obvious to make a structure corresponding to what is claimed”” (Ans. 5).

The issue before us, then, is as follows:

² Only arguments made by Appellant have been considered in this decision. Arguments which Appellant could have made but did not make in the Brief have not been considered and are deemed waived. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2004).

Has Appellant shown that the Examiner erred by not articulating a motivational statement for combining the teachings of He, Chen, and Rhodes?

FINDINGS OF FACT

The relevant findings of fact (FF) include the following:

1. The Examiner did not articulate a motivational statement for combining the teachings of the He, Chen, and Rhodes references (Ans. 3-5).
2. The Examiner states that one skilled in the art ““would have found it obvious to make a structure corresponding to what is claimed”” (Ans. 5).

PRINCIPLES OF LAW

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If that burden is met, then the burden shifts to the Appellants to overcome the prima facie case with argument and/or evidence. *Id.* The Supreme Court, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), stated that “[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

ANALYSIS

The Examiner did not articulate a motivational statement for combining the teachings of the He, Chen, and Rhodes references (FF 1). The Examiner merely states that one skilled in the art ““would have found it obvious to make a structure corresponding to what is claimed”” (FF 2).

The rejection on obviousness grounds cannot be sustained by a conclusory statement (i.e., ““would have found it obvious to make a structure corresponding to what is claimed””) and the Examiner did not articulate any reasoning to support the legal conclusion of obviousness. *See KSR*, 550 U.S. at 418. Thus, the Examiner did not meet the initial burden of presenting a prima facie case of obviousness. *See Oetiker*, 977 F.2d at 1445.

For the above reasons, Appellant has shown error in the Examiner’s rejection of claims 1-7 and 16 under 35 U.S.C. § 103(a) based on the lack of a motivational statement to combine the teachings of He, Chen, and Rhodes.

CONCLUSION

Under 35 U.S.C. § 103, Appellant has shown that the Examiner erred by not articulating a motivational statement for combining the teachings of He, Chen, and Rhodes.

ORDER

The decision of the Examiner to reject claims 1-7 and 16 under 35 U.S.C. § 103(a) is reversed.

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REVERSED

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